

REAP

Renewable Energy Action Project

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California Energy Commission
Attn: Docket No. 04 IEP 1K
1516 Ninth Street
Sacramento, CA 95814-5512

October 14, 2005

Delivered by Electronic Mail
(docket@energy.state.ca.us)

RE: 04 IEP 1K Committee Draft Document Hearings
Support for Transportation Fuels Recommendations

Dear Commissioners,

The Renewable Energy Action Project (REAP) – a national coalition of environmentalists, private foundations, local government agencies, renewable energy advocates and producers – appreciates the opportunity to comment on the Draft IEPR. REAP strongly supports a final adoption of the “transportation fuels” policy strategies set forth in Chapter 2 of the draft report. While we commend the Commission’s efforts to put forth a comprehensive and aggressive set of recommendations, all of which are critical, we would like to offer comments in the following key areas.

1. Renewable Fuels Standards & Pollutant Portfolio Approach

REAP is particularly encouraged by the Commission’s focus on renewable fuels as a viable near-term strategy to reduce petroleum dependence and carbon emissions. While California must curb its overall demand for liquid transportation fuels to create a sustainable transportation energy market, it is critical that the State also secure the great potential of ethanol and biodiesel to volumetrically displace hydrocarbon fuels consumption. Simply put, state-level ethanol blending programs are the most viable near-term strategy to mitigate the risks of petroleum dependence, including pump price spikes, environmental degradation and the statewide exportation of jobs and capital to out-of-state petroleum producers. Unlike the policy strategies that are contingent upon

infrastructure changes – such as E85 and the Hydrogen Highway Plan – ethanol and biodiesel blending can be ramped up immediately to curb petroleum demand and reduce carbon emissions in today’s vehicles.

There has been some concern that ethanol and biodiesel fuel diversification programs might be problematic in the context of ongoing fuels work conducted by the California Air Resources Board (CARB). REAP does not believe there is a conflict. The Predictive Model currently allows 10% ethanol blends, fully mitigating any NOx emissions increases attributable to E10 and at least partially mitigating any permeation emissions increases that occur as a result of ethanol blending. Any Model adjustments adopted by CARB during the next several months, particularly with regard to improving how the Model accounts for permeation, will be implemented by the time any RFS is enacted. This will (further) prevent emissions backsliding.

With regard to the proposed Renewable Diesel Fuel Standard (RDFS), low-level biodiesel blends are generally compliant with CARB clean diesel standards, as well as Division of Measurement (DMS) standards. E-diesel blends are also a possibility for ramping up renewable diesel blends in the intermediate term.

The two primary obstacles to increased biodiesel blending, from a public policy perspective, are increased NOx emissions and lack of production capacity. However, neither issue justifies delaying the process of designing and adopting a diesel RFS. With regard to NOx emissions, the State should immediately begin the process of providing incentives for, or requiring 1-5 percent biodiesel blends. Such blends have a negligible or very minor impact on NOx emissions clearly mitigated (from an ozone perspective) by simultaneous reductions in total hydrocarbon and CO emissions. During the 1-5% biodiesel blend implementation period, the State should conduct further investigations into the wide test-to-test, vehicle-to-vehicle (and often directional) disparities in NOx emissions impacts associated with B20 in order to tailor a program that protects air quality. This can be done without delaying the “front end” implementation of a diesel RFS program.

Clearly, any renewable diesel program must account for the production capacity limitations of renewable diesel feedstocks. Much has been made of the limited production capacity of biodiesel. However, under “aggressive” scenario estimates offered by the CEC, a California biodiesel industry could displace more than 10 percent of the projected 2020 diesel market with biodiesel, even if diesel market growth continues unabated. The utilization of out-of-state biodiesel production and “e-diesel” blends could greatly increase the potential for California to meet the requirements of an aggressive diesel RFS performance standard. In general, the renewable fuel industry has reacted quickly to new market opportunities.

With the existing fuels regulatory framework maintained to protect against air quality backsliding, REAP also supports the proposed examination into the feasibility of incorporating a “pollutant portfolio” approach into the fuels verification process at CARB. Several independent reports, including CARB data, have confirmed that fuel blends will play an increasingly minor role in the ongoing reduction of the mobile source inventory for NO_x, CO and VOCs. Significant annual reductions in the mobile source inventory will occur irrespective of the alterations in fuel blends made possible by ethanol and biodiesel. As such, California should immediately begin the process of “maturing” the Predictive Model to incorporate the obvious “other” environmental benefits of non-petroleum fuels, such as carbon, particulate and unaccounted for emissions of toxics.

Notably, this does not mean that the potential NO_x and permeation emissions impacts of biodiesel and ethanol, respectively, will be traded for fuels diversification. As discussed, fuels regulations will remain in effect. And CARB’s ongoing efforts to further reduce emissions of criteria pollutants must continue. However, because we have reached the point of “diminishing returns” with regard to fuel-blend reductions in mobile source emissions, expanding the Model beyond NO_x, CO and VOCs is an absolutely critical step toward ensuring that California fuels regulations continue to make significant environmental gains.

2. Promotion of E85 and FFVs

REAP also strongly supports efforts to promote E85 and FFVs. As is the case with ethanol and biodiesel, E85 and FFVs are near-term solutions to the problems associated with petroleum dependence.

As the leading consumer of transportation fuels in the United States, California is behind the curve when it comes to E85. Several states have implemented grant programs for retailers to install E85 pumps and rebate programs for consumers using E85. E85 is anywhere from 20-60 cents cheaper per gallon than conventional gasoline. In Minnesota, E85 is largely responsible for the 5,300 jobs and \$1.36 billion in economic returns reportedly the result of in-state ethanol blending programs.

While incentives must be adopted that will encourage the availability and appeal of E85 fuels, automakers are the key to these programs. The auto industry has demonstrated its capability of producing flex fuel vehicles (FFVs) overseas at little or no additional cost to consumers. While the best method to promote FFVs in California has yet to be determined, it is clear that the report’s recommendation to investigate the feasibility of requiring FFVs and/or creating state/industry agreements is a prudent course of action for California. We strongly encourage the Commission to make a graduated FFV requirement the centerpiece of any policy initiative to promote E85.

We also encourage the Commission to avoid promoting E85 as a “specialty” fuel. An aggressive RFS performance standard need not be met by either “low blends” or “high blends” exclusively. This is one area where the market can dictate the outcome. If promoted as a fungible solution to petroleum dependence in partnership with “low blends” and FFV vehicles, REAP believes that E85 could be a major player in mitigating California’s petroleum dependence problem with strong political, economic and environmental appeal. But promoting E85 as a specialty fuel, dependent on case-by-case financial assistance, permitting and regional programs, will only “incrementalize” and limit the penetration of ethanol into the market. E85 should be maximized as a strategy to displace petroleum use statewide, and not to “bottle up” ethanol market growth as a “specialty” fuel market.

3. Plug In Hybrid Technology

Plug-in hybrid technology has tremendous potential as a near-term strategy to reduce California petroleum dependence. Like FFVs, there are no significant technological or infrastructure hurdles preventing market penetration of plug-in hybrids. The potential to achieve fuel mileage ratings in excess of 100 miles per gallon in the near term presents a tremendous opportunity to reduce fuel demand in California while simultaneously reducing emissions of criteria pollutants and greenhouse gases.

There are several additional benefits of plug-in hybrids.

- (1) At current electricity prices, plug-in hybrids achieve the gasoline equivalent cost of approximately \$1.00 per gallon. Fuel savings of this magnitude offer a “built in” incentive for consumers to purchase these vehicles.
- (2) Plug-in hybrids can be paired with ethanol, bio-diesel, and even hydrogen-fueled cars. FFV plug-in hybrids have the potential to reduce petroleum use by up to 98 percent. As a result, from a public perspective, incentives to promote plug-in technology complements other petroleum displacement initiatives.
- (3) Plug-in hybrids have the potential to improve the efficiency of the California electrical grid via vehicle-to-grid connection technology. Plug-in hybrids can sell power back to the grid during periods of peak demand or as a regulatory service to keep voltages steady.

It is critical that California support the development and commercialization of this technology. Such policies might include manufacturer incentives, demand creation policies, and research and development support. With a relatively small investment, California could again lead the country toward cleaner vehicles.

4. Flexibility vs. Market Certainty

REAP encourages the Commission to strike a careful balance between policy recommendations that create flexibility in the market and those that include performance standards. California needs both types of policies to create change in the California transportation fuels market.

Stakeholder calls to soften performance standards for the purposes of “flexibility” should be reviewed with an eye toward the need to create a stable platform for private equity investments in renewable energy sources. For example, current fuels regulations encourage the blending of nearly 1 billion gallons of ethanol in California. However, this market is “exposed” because the Clean Air Act no longer requires oxygenates in California, and ethanol blending from a regulatory and market perspective is completely voluntary. While ethanol blending at some level remains a near certainty, the “flexibility” in the market is chilling further private equity investment in California producers. This market dynamic undercuts the growth of a California biofuels industry, perpetuates the State’s reliance on imported liquid fuels, and further delays the potential for the State to promote biomass-to-fuels programs. Until the State creates a market and regulatory “foundation” for fuels diversification, the potential of a California biofuels industry will not be realized. On the other hand, market based incentives have been successful in certain areas, including encouraging retailers to install E85 pumps and consumers to buy E85 fuel. As such, we strongly encourage the Commission to articulate (in the report) the need for both market-based incentives and performance standards.

REAP looks forward to working together on this important matter, and appreciates the opportunity to comment. We commend the Commission for providing a set of recommendations that properly recognizes the urgency of the petroleum dependence problem. We encourage the Commission to continue to move forward aggressively toward policy implementation.

Sincerely,

/s/ *R Brooke Coleman*

R. Brooke Coleman

Director

Renewable Energy Action Project